

10/089,145

Appln. No.: 10/089,145  
Amendment dated March 20, 2006  
Reply to Office Action of September 19, 2005

~~decoding an initial portion of the control unit;~~

~~decoding an initial portion of the data unit at an assumed one of the plurality of spreading factors; and~~

~~calculating the received power of the initial portions of the control unit and the data unit to make an estimate of the spreading factor used to transmit the data unit.~~

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Please replace the paragraph starting at page 7, line 26 with the following amended paragraph:

JD  
5/23/04  
By estimating the correct spreading factor used to transmit the data unit based on decoding only on an initial portion of the control unit and the data unit, the data unit can thereafter be properly decoded. Provision for the buffering of a whole data unit need not be made. It is also an advantage that, for the control channel, the transmission power need not be so high nor coding so powerful, because the information for decoding the data unit is not the only indicator of the spreading factor used to transmit the data unit.

Please replace the paragraph starting at page 8, line 13 with the following amended paragraph:

The data from each baseband processor 32, 34 is fed to a spreading modulation element 36. Within the spreading modulation element 36, the data for the ~~DPDCH~~ DPCCH is spread by PN code Cd in a spreading element 38 and scaled by a factor Ad in scaling element 40 to give a signal I, and the data for DPDCH is spread by PN code Cc in spreading element 42 and scaled in scaling unit 44 by a factor Ac to give a signal Q. The codes Cd and Cc are orthogonal variable spreading factor codes. The signals I, Q are then fed to a quadrature modulator (QPSK) 46 to produce a signal  $I + jQ$ . This signal is then spread again by a PN scrambling code Cscramb in spreading element 48 which is a complex user-specific scrambling code to give signal R. The codes Cd and Cc are for channelisation.